

TSINGER, V.N., kand. tekhn. nauk dots.

Calculating the stability of the hydrological magnitudes in the designing of hydroelectric power stations. Izv. vys. ucheb. zav. energ. 3 no.2:111-122 F '69. (MIRA 13:2)

1. Belorusskaya sel'skokhozyaystvennaya akademiya. Predstavlena Kafedroy gidravliki i vodosnabzheniya.

(Hydrology--Tables, calculations, etc.)

(Hydroelectric power stations)

TSINGER, V.N., dotsent (g.Gorki, Belorusskaya SSR)

Calculation of diurnal variations in the spring flow of small water-
courses in estimating spillway discharge rates. Gidr. i mel. 13
no.2:57-64 F '61. (MIRA 14:9)

(Hydrology)

TSINGER, V.N., dots., kand.tokhn.nauk

Graphs for determining the rated discharges of spillway installations with consideration of the regulating effect of reservoirs in the design of small hydroelectric power stations. Izv. vys. ucheb. zav.; energ. no.7:114-121 J1 '58. (MIRA 11:10)

1. Belorusskaya sel'skokhozyaystvennaya akademiya.
(Hydraulic engineering)

TSINGHR, V.N., kandidat tekhnicheskikh nauk.

Calculations on reducing maximal discharges from reservoirs. Gidr.
1 mel. 9 no.9:32-39 S '57. (MIRA 10:9)

(Reservoirs)

TSINGER, V.N.

AUTHOR: Tsinger, V.N., Candidate of Technical Sciences 99-9-4/9

TITLE: "Calculations for Lowering the Maximum Discharges from Water Reservoirs" (Raschety snizheniya maksimal'nykh raskhodov vodokhranilishchami)

PERIODICAL: "Gidrotekhnika i Melioratsiya", 1957, Nr 9, pp 32-39 (USSR)

ABSTRACT: Exact calculations of reductions or so called transformations of maximum discharges from water reservoirs, water balance, are very difficult. The author cites 2 equations, which he considers to be unsatisfactory, and proposes to use a more convenient method of calculating by means of graphs, expressing the relations

$$\frac{q_{\max}}{Q_{\max}} = f\left(\frac{W}{ZQ}, k_1, \eta\right)$$

where q_{\max} - maximum discharge from the-reservoir
 Q_{\max} - maximum discharge from the influx.

The graphs enable to carry out calculations in a very simple manner. There are 3 types of hydrographs - triangular, parabolic and concave-convex. Graphic calculations are composed for the two most widely used water discharge structures - spillway and pipe floodgates. The asymmetry of the hydro-

Card 1/2

99-9-4/9

"Calculations for Lowering the Maximum Discharges from Water Reservoirs"

graphs and the curve $V = f(H)$ is taken into consideration and ranges within the limits k_1 from 0.20-0.40, and η from 0.0-0.40. The author gives 6 graphic diagrams of curve groups, expressing the relation between α and β , where

$$= \frac{q_{\max}}{Q_{\max}} ; \quad = \frac{W}{\sum Q}$$

The article lists comparisons of the results of transformations of maximum discharges according to equations and graphs of the author. The article contains 11 graphs, and 3 tables.

AVAILABLE: Library of Congress

Card 2/2

- [illegible]

TSINGER, Vladimir Nikolayevich; ALEKSEYEV, G.A., otv.red.; IVZHENKO,
A.Kh., red.; VOLKOV, N.V., tekhn.red.

[Transformation of maximum discharge by reservoirs] Transfor-
matsiya maksimal'nykh raskhodov vodokhranilishchami. Leningrad,
Gidrometeor.izd-vo, 1960. 122 p. (MIRA 14:1)
(Spillways)

TSINGER, Ya.

Animals that prey on insects. Znan.sila 31 no.9:32 8 '56.
(Insectivora) (MLRA 9:10)

TSINGER, Ya.

"On the biology of Infusoria." Protistological Laboratory, Institute of Experimental Biology (director: academician N. K. Koltsov), Ministry of Health, Moscow. by Tsinger, Ya. (p. 425)

SO: Biological Journal (Biologicheskii Zhurnal) Vol. VI, 1937, No. 2

TSINGER, Ya.

Forest protectors. Znan. sila. no.5:31-35 My '53.

(MLA 6:6)
(Forest fauna)

TSINGER, Ya.

On the shores of the Moksha River. Vokrug sveta no.3:42-45
Mr '54. (MLRA 7:2)
(Moksha Valley--Natural history)
(Natural history--Moksha Valley)

TSINGER, Yakov Aleksandrovich; PETROVSKAYA, L.P., red.; TSIRUL'NITSKIY, N.P.,
tekhn.red.

[Zoology made interesting; accounts and stories of animals; a manual
for students of secondary schools] Zanimatel'naya zoologiya; ocherki
i rasskazy o zhiivotnykh. Posobie dlia uchashchikhsia srednei shkoly.
Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1957. 149 p.
(Zoology) (MIRA 11:5)

TSINGER, Yakov Aleksandrovich; MAKAROV, V.V., red.; KORNEYEVA, V.I.,
tekhn. red.

[Entertaining zoology; essays and stories on animals] Zanimatel'naya zoologiya; ocherki i rasskazy o zhivotnykh. Posobie dlia uchashchikhsia srednei shkoly. -Izd.3., ispr. i dop. Moskva, Uchpedgiz, 1963. 182 p. (MIRA 16:8)
(Zoology--Juvenile literature)

ACCESSION NR: AP4012181

S/0191/64/000/002/0003/0006

AUTHORS: Abkin, A. D.; Auer, A. L.; Breger, A. Kh.; Vaynshteyn,
B. I.; Voropayev, Yu. V.; Gol'din, V. A.; Gromov, V. P.;
Osipov, V. B.; Syrkus, N. P.; Ushakov, V. D.; Khomikovskiy,
P. M.; Tsingister, V. A.; Chikin, Yu. A.

TITLE: Radiation polymerization of ethylene in enlarged laboratory
apparatus.

SOURCE: Plasticheskiye massy*, no. 2, 1964, 3-6

TOPIC TAGS: ethylene, radiation polymerization, reactor design,
reactor surface area, reaction rate, polymer yield, reactor tempera-
ture field

ABSTRACT: Radiation polymerization of ethylene was conducted in
laboratory reactors of 1-2 liter capacity (fig. 1 & 2). Based on
tolerances admitted in this work, it was found that the temperature
field can be calculated with sufficient accuracy. Comparison of
reaction rates and yield of ethylene polymer shows that these factors
are independent of the specific surface of the reaction space. Thus

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ACCESSION NR: AP4012181

commercial scale apparatus can be designed by estimating the process rate and yield dependence on pressure, temperature and dosage rate without concern for specific surface area of the reactor.
Orig. art. has: 1 Table and 5 Figures

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 02

SUB CODE: MA

NR REF SOV: 005

OTHER: 003

Card

2/42

"APPROVED FOR RELEASE: 03/14/2001

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APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757110007-2"

MEDVEDEV, S.S.; ABKIN, A.D.; KHOMIKOVSKIY, P.M.; GERASIMOV, G.N.; GROMOV,
V.F.; CHIKIN, Yu.A.; TSINGISTER, V.A.; AUER, A.L.; YAKOVLEVA, M.K.;
MEZHIROVA, L.P.; MATVEYEVA, A.V.; BEZZUBIK, Z.G.

Polymerization of ethylene by means of γ -radiation. Vysokom.sosd.
2 no.6:904-915 Je '60. (MIRA 13:6)

1. Fiziko-khimicheskiy institut imeni L.Ya.Karpova.
(Ethylene) (Polymerization) (Radiation)

CHERNYAYEV, I.I.; ZHELIGOVSKAYA, N.N.; TSINGISTER, V.A.

Trans effect of the hydroxyl group in isomeric diamminodibromedi-
hydroxy compounds of tetravalent platinum. Zhur. neorg. khim.

5 no. 12:2690-2699 D '60.

(MIRA 13:12)

(Platinum compounds)

(Hydroxyl group)

15.2101 Also 1209

63706
5/190/60/002/006/009/012
2015/2064

Abstract

NOVODOL, S. S. ABDEL, A. D. KHOMIKOVSKIY, P. N.

Y. A. Auer, A. I. Yakovleva, M. K. Mezhitova, P. Katsyova, A. V. Bezubik, Z. G.

817213

Polymerization of Styrene Under the Influence of γ -Radiation

57-904-915
J 16-706 -44

60 The radiation-chemical polymerization of ethylene in the gaseous phase and in organic substances was investigated at different pressure and radiation dose as well as some properties of the polymers formed.

Farmer) (1400, 1800, and 20000 fr/m² ethyl. H₂) and pressures of 30-300 atm. Radiation dose of 17 ± 0.5 r/sec. and 25°C (some experiments were made at 50°C) were the conditions. The experiments were carried out in a corresponding device (Fig. 1). The ethylene used was mass-

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phenanthroline) analyzed by H. Y. Ahnhoon and M. Y. Suh^{12,13}. The molecular weights of the polyesters obtained were determined by the method of light scattering by H. G. Sonolito and H. Y. Ahnhoon¹⁴. Particular data on this will be given in a separate paper. The significant polymerization is between 1,3,5-trichloro- and acetone (50 atm, 25°C, ~ 100 r/w) shown (Table 1). The material, which was prepared rapidly, then in the gaseous phase. The polymerization proceeded ten times more weight of 2000-40000. Polymer of the structure $\text{Cl}_3\text{C}-\text{C}_6\text{H}_2-\text{C}(=\text{O})-\text{O}-\text{C}_6\text{H}_4-\text{O}-\text{C}(=\text{O})-\text{C}_6\text{H}_2-\text{C}(\text{Cl}_3)_2$ form in good yield in carbon tetrachloride. Polymerization in the gaseous phase was investigated at constant pressure (100-500 atm, 72 r/w) and decreasing pressure (100 and 150 atm, 17-165 atm, 25 and 50°C). The polymer yield increases rapidly if reaction is made in the presence of polyethylene (Table 2). To begin with, the polymerization rate increases with time and reaches to a constant value. The molecular weight and the characteristic viscosity of the polymer increase with time, the proceeding transformation (Table 3). The mean reaction rate amounts to 6.72 g/m² at 500 atm, 55°C, a duration of 24 hours and radiation dose of 12 r/w, and the maximum rate

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polymer (table 4). The mean molecular weight and viscosity of the polymers (table 5) rise with pressure (i.e., the ethylene concentration) and with a proportionate increase in oxygen concentration. The data are in good agreement with those reported by other workers, who find that the viscosity of polyethylene increases somewhat with the radiation dose with a proportionate increase in oxygen concentration. The molecular weight of polyethylene increases with a factor of 0.1 the radiation dose with a factor of 0.1 the increase in oxygen concentration. The molecular weight of polyethylene increases with decreasing radiation dose with a factor of 0.1 the increase in oxygen concentration. A temperature increase from 25°C to 50°C at constant ethylene concentration causes a lesser increase in the polymerization rate (350 E/W) weight (table 7). Investigations carried out by Dr. M. Kricheldorf and Dr. E. Evers in the laboratory of radiochemistry of the author's institute have shown that the polymerization rate of the author's material (0.575 g/cm³) and degree of crystallization (to 94%) are in good agreement with those reported by other workers. The results, however, only slightly from the latter with respect to the results of the author's investigations. The authors thank A. M. Berezin, I. N. Golubev, and G. A. Gol'din for assisting in carrying out the experiments with the same matters. There are 6 figures, 7 tables, and 11 references. 5 Soviet, 4 EN, 1 British, and 1 Belgian.

Case 3/4

ASSOCIATION

Physico-chemical Institute Acad. L. Ya. Karpyov

RECEIVED February 24, 1966

LUKHOVITSKIY, V.I.; TSINGISTER, V.A.; LAGUCHEVA, R.M.; KARPOV, V.L.

Inhibiting effect of certain solid additions on the radiation-chemical processes. Zhur. fiz. khim. 39 no.4:984-986 Ap '65.

(MIRA 19:1)

1. Fiziko-khimicheskiy institut imeni Karpova. Submitted Jan. 17, 1964..

26.2431

10,2000

llh82
S/197/62/000/011/002/003
B184/B102

AUTHORS: Tsinober, A., Shcherbinin, E.

TITLE: The influence of a transverse magnetic field on the resistance of bodies flown around by an electrically conducting liquid

PERIODICAL: Akademiya nauk Latviyskoy SSR. Izvestiya, no. 11 (184), 1962, 45-54

TEXT: The behavior of nonconducting cylinders placed in a mercury flow is investigated experimentally. The cylinders had the diameters $d = 0.3, 1.2, 2.05$ and 5 mm. The value obtained for the resistance coefficient

$C_f = f/2 \rho v^2 l d$ was found to be $C_f = C_0 \left[1 + f(l) \frac{M}{Re} \right]$, where f is the force exerted by the flow on the cylinder, $Re = \frac{\rho v d}{\eta}$ is the Reynolds number ($100 < Re < 5000$), ρ is the density of mercury, v is the velocity of the undisturbed flow, η is the dynamic viscosity of mercury,

$M = Bb \sqrt{\frac{\sigma}{\eta}}$ is the Hartmann number ($0 < M < 40$), where B is the magnetic field strength, b is the cylinder radius, σ is the electrical conductivity of mercury.

The influence of a transverse magnetic ...

S/197/62/000/011/002/003
B184/B102

induction, σ is the electrical conductivity of mercury, $\bar{l} = l/d$ where l is the depth of immersion of the cylinder, C_0 is the C_f value without magnetic field. $f(\bar{l}) = 3.4$ implies infinitely long cylinders. Substituting a sphere for a cylinder, the value obtained for

$C_f = \frac{F}{\frac{1}{2} \rho_v \frac{2\pi d^2}{4}}$ was found to be $C_f = C_0 \left[1 + \frac{M}{\sqrt{Re}} \right]$. It was established that

with $\frac{M^2}{Re} \gtrsim 10^{-2}$ the influence of a transverse magnetic field on the resistance is substantial when bodies are flown around by electrically conducting liquids. There are 6 figures.

ASSOCIATION: Institut fiziki AN Latv. SSR
(Institute of Physics AS LatSSR)

SUBMITTED: April 24, 1962

Card 2/2

TSINGOVATOV, I. A.

PA 20T97

USSR/Radio Broadcasting
Radio - Relay Equipment

Sep 1947

"Raising the Level of Technical Exploitation at Radio Rebroadcasting Centers," I. A. Tsingovator, Chief of Central Administration for Radio, Ministry of Communications, A. G. Lordkipanidze, Chief of Technical Exploitation Section, 2 pp

"Vestnik Svyazi, Elektro-Svyaz'" Vol VII, No 9 (90)

Mentions construction of more than 2,300 radio centers during the new 5-Year Plan. More than 25 per cent of radio centers are equipped with new apparatus type RTU-100-B, TU-500 and TU-5.

20T97

TSINGOVATOV, I. A.

Radiotranslatsionnaia set' strany. [The radio rebroadcasting network of the country]. (Radio, 1947, no. 11, p. 25).

DLC: TK540.R76

Razvitie sel'skoi radiotranslatsionnoi seti i uluchshenie kachestva raboty - vazhnaia zadacha. [The development of rural radiorebroadcasting network and the improvements of the quality of work - is the main task]. (Vestnik sviazi. Pochta, 1947, no. 6, p. 3, illus.: the new 500 watt amplifier).

DLC: HE7.V44

SO: Soviet Transportation and Communications. A Bibliography. Library of Congress, Reference Department, Washington, 1952, Unclassified.

TSINGOVATOV, I. [A]

PA 78T93

USSR/Radio Broadcasting
Radio Equipment

Mar 1948

"The Five-Year Plan of Radiofication, Completed in Four Years," I. Tsingovarov, Chief, Cen Adm for Radiofication, Ministry of Communications USSR, 3 pp

"Radio" No 3

It is hoped that by 1950 there will be in operation a radio network which will be some 75% greater than the prewar net. Ministry of Communications will have to install some 3 million radio points, and increase the number of powerful broadcasting stations threefold. Briefly describes progress achieved in fulfilling the Five-Year Plan.

ID

78T93

TSINGOVATOV, I.A., otvetstvennyy redaktor; SOKOLOVA, R.Ya., tekhnicheskii redaktor

[International Telecommunication Conference; concluding report to the conference, supplementary reports to the conference, resolutions, recommendations, and wishes] Mezhdunarodnaia konventsia elektrosvyazi; zakliuchitel'nyi protokol k Konventsii, dopolnitel'nye protokoly k Konventsii, rezoliutsii, rekomendatsii i pozhalaniia. Moskva, Sviaz'izdat, 1954. 157 p. (MLRA 10:1)

1. International Telecommunication Conference, Buenos Aires, 1952. (Buenos Aires--Telecommunication--Congresses)

SATSERDOTOV, B.P.; TSINGOVATOV, L.V.

Morozov dendrologic tract. Uch. zap. Penz. gos. ped. inst.
no.6:117-130 '59. (Penza Prvince--Arboretums) (MIRA 15:5)

CHINAYEV, M.I.; TSINGOVATOV, L.V. (deceased); PETROVA, V.A., and others.
red.; ANUFRIYEV, P.; red.

[Nature calendar of Penza Province] Kalendar' prirody
Penzenskoj oblasti. Saratov, Privolzhskoe knizhnoe izd-
vo, 1964. 128 p. (MIRA 18,2)

1. Deystvitel'nyy chlen Penzenskogo otdela Vsesoyuznogo
geograficheskogo obshchestva, starshiy inzhener-
agrometeorolog Penzenskogo gidrometeorologicheskogo byuro
(for Petrova).

TSINOBBER, A. [Ginobers, A.]; SHCHERBININ, E.

Effect of a transverse magnetic field on plate resistance. Izv. AN
Latv.SSR no.6:43-48 '63. (MIRA 17:4)

1. Institut fiziki AN Latvyskoy SSR.

TSINGOVATOV, V. A.

Country : USSR
 Category : Diseases of Farm Animals.
 Diseases Caused by Bacteria and Fungi. R
 Abs. Jour. : Ref Zhur-Biol., No 21, 1958, 96995
 Author : Bel'kov, N. P.; Vikhlyayeva, S. S.; Tsingovarov,*
 Institut. : Omsk Institute of Veterinary Sciences.
 Title : The Role of Nutrition in Raising the Resistance
 of Animals to Brucellosis.
 Orig Pub. : Tr. Omskogo vet. in-ta, 1957, 15, 101-117
 Abstract : It is shown here that the reactivity and resistance to brucellosis infection in rabbits change at different levels of protein nutrition. Rabbits kept on rations containing normal amounts of digestible protein with a medium protein ratio manifested a considerably higher resistance to brucellosis infection when they were given a subcutaneous injection of Br. melitensis culture as compared to rabbits which were kept on rations with a surplus of digestible protein

Card:

1/2

*V. A.

TSINGOVATOV, V.A.
 BARSUKOV, N.I., kand.sel'skokhozyaystvennykh nauk; KIZYURIN, A.D., doktor sel'skokhozyaystvennykh nauk; BORIMEVICH, V.A., kand.sel'skokhozyaystvennykh nauk; BORMUSOVA, S.H., agronom; VERMENICHEVA, M.D., kand.sel'skokhozyaystvennykh nauk; GESHEIZ, E.E., doktor biol. nauk; GOROKHOV, G.I., kand.sel'skokhozyaystvennykh nauk; GUBKIN, S.M., kand. veterinarnykh nauk; YELYKOVA, L.I., kand.sel'skokhozyaystvennykh nauk; KOTT, S.V., doktor biol. nauk; KOCHKINA, V.A., agronom; LAMBIN, A.Z., doktor biol.nauk; LEBEDEVA, Ye.M., agronom; MALAKHOVSKIY, A.Ya., doktor sel'skokhozyaystvennykh nauk; MAYBORODA, N.M., kand. sel'skokhozyaystvennykh nauk; MAYDANYUK, A.E., zootekhnik; OVSYANNIKOV, G.Ye., kand.sel'skokhozyaystvennykh nauk; PETROV, F.A., kand.biol.nauk; POGORELOV, P.F., agronom; POLKOSHNIKOV, M.G., dotsent; RENARD, G.K., kand. sel'skokhozyaystvennykh nauk; RUCHKIN, V.N., prof.; SADYRIN, M.M., kand.sel'skokhozyaystvennykh nauk; TOBOL'SKIY, V.YA., vetvrach; TYAZHEL'NIKOV, S.D., kand.sel'skokhozyaystvennykh nauk; UKHIN, I.I., kand.sel'skokhozyaystvennykh nauk; FEDOROV, G.V., kand.sel'skokhozyaystvennykh nauk; CHIRKOV, D.I., zootekhnik; TSINGOVATOV, V.A., prof.; SHVETSOVA, A.N., kand.sel'skokhozyaystvennykh nauk; SHEVLYAGIN, A.I., kand.sel'skokhozyaystvennykh nauk; SEMENOVSKIY, A.A., red.; GOLUBINSKAYA, Ye.S., red.; NECHAYEVA, Ye.G., red.; PERESYPKINA, Z.D., tekhnicheskiiy red.

[Siberian agronomist's reference manual] Spravochnaia kniga agronoma Sibiri. Moskva, Gos. izd-vo sel'khoz. lit-ry, Vol.2. 1957. 839 p.
 (Siberia--Agriculture) (MIRA 11:3)

VASILEVAKAYA, Vanda [Wasilewska, Wanda]; VASILEVSKAYA, E. [translated];
RYABININA, A., red.; YAKOVLEV, B., red.; TSINGOVATOVA, Ye., red.;
TROSHIN, A., tekhn.red.

[Under the sky of China. Trnalated from the Polish] Pod nebom
Kिताia. Moskva, Gos.izd-vo khudozh. lit-ry, 1953. 310 p.
(China--Description and travel) (MIRA 11:5)

ZABUTOV, S.A.; TSININ, P.N.

Maintenance and repair of weighing machines in rural districts.
Izm.tekh. no.1:59-60 Ja '60. (MIRA 13:5)
(Weighing machines--Maintenance and repair)

TSININ, P.N.

Attachment for the TKh-4 unit for testing working stationary
tachometers in a vertical position. Izv. tekhn. no.1:34 Ja '65.
(MIRA 18:4)

TSINIS, E.A. [Cinis, E.], kand.sel'skokhozyaystvennykh nauk

Deep drainage of low moors. Gidr. i mel. 12 no.11:31-35 H '60.
(MIRA 14:1)

1. Peterniyekskaya opytnaya meliorativnaya stantsiya, Latviyskaya
SSR.

(Latvia—Peat bogs)

(Drainage)

TSINIS, E. A., Cand Agr Sci — (diss) "Better-quality annual
fodder crops and their utilization in the ~~system of~~ green conveyor
on ~~the~~ humus-gley and peat-swamp^y soils." Riga, 1959. 30 pp (Min
of Higher Education USSR. Latvian Agr Acad). 200 copies
(KL,40-59, 105)

45

TSINKALOV, A.M.; CHERNYKH, V.V.

Welded and forged parts for high-duty forging and pressing
equipment. Sbor. Novo-Kram. mashinostroi. zav. no.3:104-111
'59. (MIRA 17:1)

TSINKALOVA, N.

For a greater efficiency, initiative and persistence. Fin.SSSR 38 no.2:
18-22 F '64. (MIRA 17:2)

1. Upravlyayushchiy Kuybyshevskoy kontoroy Stroybanka.

~~TSINKALOVA, N.~~

Our suggestions. Fin. SSSR 20 no.1:71-72 Ja '59.

(MIRA 12:2)

1. Upravlyayushchiy Kuybyshevskoy kontoroy Prombanka.
(Kuybyshev Province--Economic-policy)

TSINKALOVA, N.

Let us understand more deeply the economics of construction.
Fin. SSSR, 17. no. 3: 63-65 Mr '56. (MLRA 9:7)
(Kuybyshev Province--Construction industry--Finance)
(Bank and banking)

USSR / Human and Animal Physiology. Carbohydrate Metabolism.

T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 69821

Author : Tsinkalovs'ka, S. M.

Inst : Not given

Title : The Content and Intensity of Renowal of Glycogen in the
Skeletal and Heart Muscles of the Rabbit with Experimental
Muscular Dystrophy

Orig Pub : Ukr. biokhim. zh., 1957, Vol 29, No 4, 458-469

Abstract : Studies were carried out on three groups of rabbits -
with experimental muscular dystrophy produced by vitamin E
(I) deficiency, normal, and starved (II). In the muscles
of the thigh (MT) of I, the content of glycogen (G) was
one-half (200 mg percent) the G content in the MT of II
[the "II" should read "normal"]. The G content in the MT
of II was the least (59-150 mg percent). The G content in
the heart muscle of I and II was 385.4 and 397.6 mg percent

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USSR / Human and Animal Physiology. Carbohydrate Metabolism.

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Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 69821

respectively, while the normal was 409.98 mg percent. For determination of the intensity of replenishment of G, the same animals, 90 minutes prior to decapitation, were given acetate- $1-C^{14}$ subcutaneously in a dose of 30,000 impulses/min per gm body weight. The intensity of renewal of G, determined by the number of impulses/min in the MT and heart muscle in I was lower (4975 and 950 respectively) than in II (402-2750 and 360 respectively) and in the normal (260 and 348).

Card 2/2

TSINKALOV'S'KA, S.M.

Content and renewal intensity of glycogen in skeletal and cardiac muscles of rabbits under conditions of experimental muscular dystrophy [with summary in English]. Ukr.biokhim. zhur. 29 no.4: 458-469 '57. (MIRA 11:1)

1. Institut biokhimii AN URSR, M. Kiiiv.
(MUSCULAR DYSTROPHY) (GLYCOGEN)

L 05237-67 EWP(k)/EWP(h)/EWT(d)/EWP(l)/EWP(v)

ACC NR: AR6020535

SOURCE CODE: UR/0372/66/000/001/G036/G037

AUTHOR: Avraamov, I. S.; Derkach, V. A.; Derkach, N. G.; Nesytsev, V. I.; Selyandin, V. I.; Tsinker, E. B.

TITLE: A system for the programmed control of wide-reach multiple-stop mechanisms

SOURCE: Ref zh. Kibernet, Abs. IG251

REF SOURCE: Mezhvuz. sb. tr. Zap. -Sib. sovet po koordinatsii i planir. nauchno-issled. rabot po tekhn. i yestestv. naukam, vyp. 4, 1965, 129-136

TOPIC TAGS: automatic programming, crane, control circuit

ABSTRACT: A system (S) for the programmed control of the movements of a grab-type bridge crane is described. The S may also be used to control mechanisms moving over distances of several dozen meters and longer. This S is characterized by the discrete determination of the coordinates of the bridge and carriage of the crane, accomplished at individual points by means of independent contact pickups. Then the precision of the halt does not exceed the dimensions of the pickup. The article presents a schematic diagram of a S with the following elements: 1) setting device; 2) encoder of the specified coordinate; 3) device for determining

Card 1/2

UDC: 62-506:681.142.:353:621

L 05237-67

ACC NR: AR6020535

crane position; 4) encoder of the current coordinate (CC); 5) CC memory; 6) digital arithmetic device (AD); 7) instruction device. The setting device specifies the coordinates of the two points between which the crane should move, and it consists of two pairs of switches. The encoder of the specified coordinate converts these coordinates to binary code. The device for determining the crane's position consists of a self-excited key oscillator with an emitting coil, mounted on the crane bridge; receiving coils, mounted directly along the crane's path, and distributed encoder of CC, converting the signal to the number of the fixed coil at which the crane bridge happens to be present at the moment. The current-coordinate memory serves to store the CC code during the movement of the bridge from one pickup to another, and also to convert the code to its potential form. Since the specified and current coordinates are expressed in binary code, the instructions are triggered by the comparison of the binary numbers in the AD and transmission of the results of the comparison to the instruction device. Two AD designs, one based on contact elements and the other, on contactless elements, were investigated. The operating principle and diagram of AD are presented, as are the diagrams of the other components. For mechanisms operating at high speeds and requiring precise stopping correct to ~ 0.1 m it is more expedient to employ the contactless type of AD. To enhance the precision of stopping a DC electric drive must be used, and the control signals must be generated continuously, on using a continuous servosystem for this purpose. The latter should include auto-correction at definite points along the path of the crane. 5 illustrations. Bibliography of 4 titles. V. M. [Translation of abstract]

SUB CODE: 09, 13, 20/

Cord 2/2

TSINKER, G.P., inzh.

Planning and construction of "trestle bulwark" embankments from
precast reinforced concrete. Rech.transp. 18 no.7:47-48 J1 '59.

(Embankments)

(MIRA 12:11)

TSINKER, G.P., inzh.

Constructing wharves on rock foundation beds. Rech. transp. 17
no.12:41-42 D '58. (MIRA 12:1)

(Wharves)

TSINKER, G.P., inzh.

Piers built of reinforced concrete. Rech.transp. 16 no.10:35

0 '57.

(MIRA 10:12)

(Piers) (Reinforced concrete construction)

TSINKER, G.P., inzhener; LAZHENNIK, G.Ye.

Wharf structures for river ports. Rech.transp. 15 no.7:21 J1 '56.
(Wharves) (MIRA 9:9)

BUDIN, A.Ya., inzh.; TSINKER, G.P., inzh.

Using a T-shaped reinforced concrete sheet pile in harbor construction. Trudy LIIVT no.26:135-142 '59. (MIRA 14:9)
(Sheet piling) (Harbors) (Concrete piling)

TSINKER, G.P., inzh.

Using flexible piles in the construction of embankments.
Transp. stroi. 14 no.8:20-21 Ag '64.

(MIRA 18:1)

TSINKER, G., inzh.

Investigating trestle-type embankment. Tech. transp. 23 no. 11:36-37
N 164. (MIRA 18:3)

MOSELEY, D. G., TRUNKER, M.G., SEORYAN, M.Ye.

Amines and their derivatives. Part IV. Certain *p*-substituted
of β -intercroplonic and as possible antiparallel. *Chem. Abstr.*
Am. J. R. Khim. nauki 18 no.4:384-388 1965.

(MIA: 28110)

1. Institut khimiy organicheskoy khimii AN Arm. SSR. Submitted
June 3, 1966.

L 27078 -66

ACC NR: AP6017450

SOURCE CODE: UR/0171/65/018/004/0384/0388

AUTHOR: Mndzhoyan, A. L.; Tsinker, M. G.; Akopyan, N. Ye.

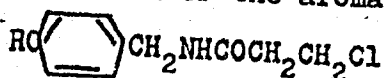
ORG: Institute of Fine Organic Chemistry, AN ArmSSR (Institut tonkoy organicheskoy khimii AN ArmSSR)

TITLE: Study of amines and their derivatives. XVI. Certain p-alkoxybenzylamides of beta-chloropropionic acid as possible antispasmodic agents

SOURCE: AN ArmSSR. Izvestiya. Seriya khimicheskikh nauk, v. 18, no. 4, 1965, 384-388

TOPIC TAGS: amine, organic synthetic process, nonmetallic organic derivative, pharmacology

ABSTRACT: In the development of the study on the synthesis of various groups of amines and their derivatives, and on the basis of the antispasmodic activity of benzylamide of β -chloropropionic acid (khlorakon), used in medicine to treat epilepsy and parkinsonism, the analogs of khlorakon, containing alkoxyl groups in the para-position of the aromatic nucleus were obtained:



According to the literature the dimethoxy derivative of khlorakon exhibits antispasmodic action which is not inferior to the action

Card 1/2

UDC: 541.697+547.298.1+547.464

L 27078-66

ACC NR: AP6017450

of khlorakon. In this connection the authors were interested in showing the effect of the alkoxy radicals on the antispasmodic activity of benzylamides. Thus, 10 p-alkoxybenzylamides of β -chloropropionic acid and the intermediate p-isobutoxy-, amyloxy-, hexyloxy- and heptyloxy-benzylamines were obtained. The pharmacological data indicated that the introduction of the alkoxy radical in the para position of the aromatic nucleus of khlorakon sharply reduces the antispasmodic activity of the latter. Orig. art. has: 3 tables. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: 03Jun64 / ORIG REF: 010

Card

2/2

H

BESSONENKO, V.V.; TSINKER, M.N. (Novo-Kuznetsk)

Initial experience in organizing the work of a therapy center for terminal states. Sov. zdrav. 21 no.5:67-68 '62. (MIRA 15:5)

1. Iz tsentra terapii terminal'nykh sostoyaniy pri kafedre travmatologii i ortopedii (zav. - prof. L.G.Shkol'nikov) Novo-Kuznetskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey (dir. - dotsent G.L.Starkov) i Gorodskoy stantsii skoroy meditsinskoj pomoshchi (glavnyy vrach M.N.TSinker).

(DEATH, APPARENT) (NOVOKUZNETSK—RESUSCITATION)

CHIBUKMAKHER, N.B., prof.; TSINKIN, A.M. (Khar'kov)

Use of threads and fabric from plyamide resins in the surgery of peripheral nerves. Vrach.delo no.3:75-80 Mr '63.

(MIRA 16:4)
1. Laboratoriya eksperimental'noy neyrokhirurgii Ukrainskogo
nauchno-issledovatel'skogo psikhonevrologicheskogo instituta.
(SUTURES) (NERVES, PERIPHERAL SURGERY)

KRASYUKOV, A.F.; TSIN'KO, A.V.

More accurate methods for determining the strength coefficient
of petroleum coke particles. Trudy Bash NII NP no.3:119-122
'60.

(Petroleum coke)

(MIRA 14:4)

KRASYUKOV, A.F.; TSIN'KO, A.V.

Studying the mechanical properties of petroleum cokes. Trudy
BachNII NP no.1:85-99 '59. (MIRA 12:6)
(Petroleum coke)

TSINKOLENKO, B. P.

32527. Vol'skiy, S. A. Metod izgotovliniya rolikov dlya bezalmaznoy provki shlifoval'nykh krugov. Stanki i instrument, 1949, No. 10, s. 17-18.

SO: Letopis' Zhurnal'nykh Statey Vol. 44

P

USSR/General and Special Zoology. Insects

Abs Jour : Ref Zhur - Biol., No 6, 1958, No 25752

Author : ~~Tainkovskiy Ya.P.~~

Inst : Not Given

Title : A New Method of Fixing the Prognosis of May Beetle Larvae
Passing into the Chrysalis Stage. (novyy metood ustanovleniya
prognoza okuklivaniya lichinok maiskogo khrushcha)

Orig Pub : Sb. tr. po zashchite rast. Riga, AN LatvSSR, 1956, 101-114

Abstract : A cytological study of the development of the female and the male sex systems was carried out, beginning with the embryo and ending with the death of the beetles. The larvae which passed into the chrysalis stage in the present year were characterized in May by the following properties. The spermatogoniae multiplied together in groups of a few in cysts by means of mitosis. In the present year the larvae, the width of whose male sex glands was equal to 1.2 mm and more, passed into the chrysalis stage. In the female sex glands the light cells occupied 1/3-1/2 of the germarium length, in the

YUGOSLAVIA/Microbiology - Sanitation Microbiology,

F-4

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67228

Author : Tsinleski, B.G.

Inst : Khig. in-t

Title : Fecal Types of *Welchia perfringens*, Causing Food Poisonings
and Their Diagnosis.

Orig Pub : Glasnik Khig. in-ta, 1957, 6, No 1-2, 53-58.

Abstract : No abstract.

Card 1/1

TSINMAN, A.I.

AUTHORS: Pamfilov, A.V. and Tsinman, A.I.

73-2-5/22

TITLE: Application of the Arrhenius' kinetic equation to the electrolysis with low values of polarization. (Primenimost' kineticheskogo uravneniya Arreniusa k elektrolizu pri malykh velichinakh polyarizatsii).

PERIODICAL: "Ukrainskiy Khimicheskii Zhurnal" (Ukrainian Journal of Chemistry), Vol.23, No.2, March-April, 1957, pp.168-173, (USSR).

ABSTRACT: S.V.Gorbachev (Ref.1: S.V.Gorbachev: Zh.Fiz.Khimii, 1950, Vol.24, 888) investigated the relation between the speed of electrolysis and temperature that the character of polarisation can be determined by the application of the kinetic equation given by Arrhenius. V.A.Pleskov and N.B.Miller (Ref.3: V.A.Pleskov and N.B.Miller: Trudy Soveshchaniya po Elektrokhimii, Izd.AN SSSR, Moscow, 1953, 165) investigated changes in the current of amalgams of bismuth, lead and zinc and found a linear relation between the logarithm of the current density change and the inverse temperature. This fact leads to the conclusion that the equation by Arrhenius must also apply for small values of polarisation. The authors verified this theory by testing cathodic deposits of lead from its salt solu-

Card 1/3

73-2-5/22

Application of the Arrhenius' kinetic equation to the electrolysis with low values of polarisation. (Cont.)

tions, as sufficiently strong currents at small polarisation values can be obtained in these solutions. The electrolysis of aqueous solutions of lead nitrate and lead acetate proved the existence of a linear relation between the logarithm of the current density and the inverse temperature of polarisation at considerably lower values than 0.1 volt. The changes of cathodic polarisation with the varying current density in a 0.1 mole solution of lead nitrate and in a 0.01 mole solution of zinc acetate containing 0.02 mole acetic acid for different temperatures are given in diagrams 1 and 2. It is also shown that the polarisation is a function of the temperature during constant current density (Diagram 4.). During small current densities (0.17 to 0.09 ma/cm²) this relation can be defined directly. The polarisation at constantly increasing temperatures was measured at constant current densities for this investigation. It is shown that the polarisation changes considerably more at low temperatures and that it changes insignificantly at

Card 2/3

73-2-5/22

Application of the Arrhenius' kinetic equation to the electrolysis with low values of polarisation. (Cont.) higher temperatures. Values for the electro-conductivity of lead at various temperatures are tabulated (viz. Table 1).

There are 9 diagrams, 1 table and 8 references, all of which are Slavic.

ASSOCIATION: Czernovicz University, Physical Chemistry Laboratory. (Chernovitskiy Universitet, Laboratoriya Fizicheskoy Khimii).

SUBMITTED: May 3, 1956.

AVAILABLE: Library of Congress

Card 3/3

TSINMAN, A.I.

Decrease of hydrogen overvoltage on a mercury cathode caused by the possible dissolution of the platinum anode. Zhur. fiz. khim. 36 no.6:1388-1389 Je'62 (MIRA 17:7)

1. Lisichanskiy filial Gosudarstvennogo nauchno-issledovatel'skogo i proyektного instituta azotnoy promyshlennosti i produktov organicheskogo sinteza.

PAMFILOV, A.V.; TSINMAN, A. I.

Overtension of oxygen on platinum. Ukr. khim. zhur. 23 no.5:579-583
'57. (MLRA 10:11)
(Electrochemistry) (Oxygen) (Platinum)

TSINMAN, A.I.

Hydrogen overvoltage on a mercury cathode activated by small amounts of metallic platinum. Izv.vys.ucheb.zav.; khim.i khim.tekh. 3 no.6: 1104-1106 '60.
(MIRA 14:4)

1. Chernovitskiy gosudarstvennyy universitet, kafedra fizicheskoy khimii.

(Hydrogen) (Overvoltage)

S/073/60/026/004/012/018/XX
B023/B064

AUTHOR: Tsinman, A. I.

TITLE: Oxygen Overvoltage on Gold in Sulfuric Acid Solutions

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, 1960, Vol. 26, No. 4,
pp. 454-460

TEXT: It was the aim of the author's investigation to study the oxygen overvoltage on gold by means of the polythermal lines of electrolysis. By the usual compensation method anodic polarization curves were recorded in 0.1 N and 6.5 N sulfuric acid solutions in the range of 10^{-6} - 10^{-2} a·cm⁻². Measurements were made at temperatures of 21, 40, 60, and 80°C. A gold lamella soldered into glass served as anode, a platinum lamella as auxiliary electrode, which had been treated with hot nitric acid. The potential of the oxygen electrode was determined by the method of N. N. Voronin and M. A. Shakhova (Ref. 4). The author is of the opinion that the change of the course of the polarization curve on gold may be explained by the change of the anode surface at different potentials. The oxygen separation in the region of the linear course of the polarization curve occurs on the

Card 1/4

Oxygen Overvoltage on Gold in Sulfuric Acid Solutions

S/073/60/026/004/012/018/XX
B023/B064

surface of the electrode covered with Au_2O_3 . The inclination coefficient of the polarization curve changes only little with increasing concentration; with a 6.5 N solution it is 0.064 v. The oxygen separation potential increases with decreasing pH. The overvoltage increases by 20-40 mv only. Figs. 2 and 3 illustrate the effect of temperature on the overvoltage of oxygen. The temperature coefficient amounts to 1 mv/degree in a 0.1 N H_2SO_4 solution. In the 6.5 N solution it amounts to almost 2 mv/degree. Fig. 4 shows the linear dependence of the current density logarithm on the reciprocal temperature at constant overvoltage. The activation energy in 0.1 N solution determined from the isopotential straight line is practically constant and amounts to 6.7 - 7.5 kcal. in the investigated range of polarization. In the 6.5 N sulfuric acid solution, it amounts to 13 kcal at an overvoltage of 0.75 v. At an increase of the overvoltage to 0.85 it decreases to 6 kcal. The author is of the opinion that the independence of the experimental activation energy of the electrode process on the value of the potential, proves the diffusion character of the polarization. The activation energy of the anodic process is considerably higher, which indicates the chemical character of the polarization. The

Card 2/4

Oxygen Overvoltage on Gold in Sulfuric Acid Solutions

S/073/60/026/004/012/018/XX
B023/B064

inclination coefficient of polarization increases with increasing concentration. The values of the anodic oxygen separation on gold differ considerably in a 0.1 N and 6.5 N H_2SO_4 solution. At an overvoltage of 0.75 - 0.80 the difference between the activation energies is approximately 4 kcal. The increase of the activation energy may be explained by the change of the electrode surface. G. Deborin and B. Ershler (Ref. 13) proved that in acid solutions the binding of oxygen to the electrode surface is better than in alkaline solutions. Gold oxides are acid and therefore become more durable with increasing acid concentration. In conclusion, the author compares the results of his studies with the dependence of the activation energy value of the anodic oxygen separation on the platinum electrode on the sulfuric acid concentration. He finds that the theory of the dependence of the activation energy of anodic oxygen separation on the energy of the binding metal-oxygen is generally valid. At increasing binding energy between oxygen and electrode, the activation energy increases, as compared with the polythermal method. If the binding energy is reduced also the activation energy decreases. Finally, a scheme of the anodic process is given and explained. The author thanks Professor A. V. Pamfilov for valuable advice. Papers of Z. V. Nikolayeva and Card 3/4

Oxygen Overvoltage on Gold in Sulfuric Acid
Solutions

S/073/60/026/004/012/018/XX
B023/B064

A. I. Krasil'shchikov (Refs. 5, 6) are mentioned. There are 5 figures
and 20 references: 15 Soviet, 4 British, and 1 Spanish.

ASSOCIATION: Chernovitskiy gosudarstvennyy universitet
(Chernovtsy State University)

SUBMITTED: December 22, 1958

Card 4/4

TSINMAN, A.I.

Oxygen overvoltage on gold in perchloric acid solutions. Izv. vys.
ucheb. zav.; khim. i khim. tekhn. 4 no. 3: 387-392 '61.

(MIRA 14:10)

1. Chernovitskiy gosudarstvennyy universitet, kafedra fizicheskoy
khimii.

(Gold)
(Perchloric acid)
(Electrochemistry)

20365

S/020/61/136/005/029/032
B101/B#06

26. 252/

AUTHORS: Tur'yan, Ya. I. and Tsinman, A. I.

TITLE: The effect of concentration and type of alkali on the oxygen
overtension at the nickel anode

PERIODICAL: Doklady Akademii nauk SSSR, v. 136, no. 5, 1961, 1154-1157

TEXT: The authors state that the data published on the effect of the $[\text{OH}]^-$ concentration on the oxygen overtension η of a smooth nickel anode are contradictory and comprehend only low current densities i . Experiments were therefore conducted with the participation of L.F. Gushchina, the conditions of which were similar to those described in Ref. 4. However, no rotating electrode was used, and the resistance drop was measured by means of several electrolytic switches at various distances from the electrode (galvanic nickel on platinum wire). Linear dependence of the potential on the distance was found for $i = \text{const}$. The experiments were made at 25°C with purified KOH, NaOH, and LiOH. The results obtained for

$\eta = f(\log i)$ are shown in Figs. 1 to 3. Three sections appear: section I, flatly rising, with the limiting phase $\text{Ni}_2\text{O}_3 + 2\text{OH}_{\text{ads}} \rightarrow 2\text{NiO}_2(\text{Ni}_2\text{O}_4) + \text{H}_2\text{O}$

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20365

S/020/61/136/005/029/032

B101/B106

The effect of concentration ...

(1) for $\eta = \text{const} + (RT/2F)\ln i$ (2). Then, the steeply rising section II follows and, finally, section III with $\text{OH}^- - e \rightarrow \text{OH}_{\text{ads}}$ (3) as limiting phase and $\eta = \text{const} + (RT/4F)\ln i - [(1-\alpha)/\alpha] (RT/F)\ln [\text{OH}]^- - \varphi_1(1-\alpha)/\alpha$ (4).

The course of the curve depends on the nature of the alkali. In the range $[\text{OH}]^- = (2 - 7.5)\text{M}$, η increases in the order $\text{K}^+ < \text{Na}^+ < \text{Li}^+$, while for lower $[\text{OH}]^-$, the course is reverse. For this behavior of the nickel electrode, a change of the catalytic properties of its surface is assumed owing to incorporation of alkali ions into the lattice of the oxides. Concentration and nature of the alkali cation manifest themselves by the length of section III (corresponding to complete covering with NiO_2) increasing in the order $\text{Na}^+ < \text{K}^+ < \text{Li}^+$. The slow increase of η speaks in favor of this assumption as soon as some LiOH is added to the KOH solution at $i = \text{const}$. Compared with NaOH and KOH , the increase of η in LiOH is already considerable in the range $10^{-3} < i < 10^{-2} - 10^{-1} \text{ a/cm}^2$. It is concluded therefrom that during charging of an alkali battery with $i > 10^{-1} \text{ a/cm}^2$, the battery capacity is only slightly affected by addition

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20365

The effect of concentration ...

S/020/61/136/005/029/032
B101/B206

of LiOH. The dependence of η on $[\text{OH}]^-$ is studied. In order to exclude side reactions, the alkali was quickly diluted with water at $i = \text{const}$ without switching off the current. It was found that for NaOH the over-tension η in sections I and III is independent of $[\text{OH}]^-$. In KOH, the function $\eta = f(\log [\text{OH}]^-)$ takes a linear course in sections I and III. The same is valid for LiOH in section III. The coefficients of the inclination of the function $\eta = f(\log i)$ in section I (0.032 - 0.047 at 7.5 - 0.6 M KOH; 0.030 - 0.031 at 9.5 - 0.4 M NaOH) and the fact that η is independent of $[\text{OH}]^-$ proved the limiting effect of reaction (1). The coefficient of inclination in section III (0.090 - 0.130) corresponds to the limiting phase (3). In order to explain the fact that η is independent of $[\text{OH}]^-$, it is assumed that $\eta_1 = \text{const} - (RT/F) \ln [\text{OH}]^-$ (5). The validity of equation (4) was also confirmed for the charged nickel oxide electrode, but on the condition that $\psi = 0$. There is therefore a difference in the behavior of the nickel oxide electrode and the smooth electrode studied by the authors. There are 3 figures and 16 references: 14 Soviet-bloc and 2 non-Soviet-bloc.

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20365

S/020/61/136/005/029/032
B101/B206

The effect of concentration

ASSOCIATION: Lisichanskiy filial Gosudarstvennogo nauchno-issledovatel'-
skogo i proyektnogo instituta azotnoy promyshlennosti i
produktov organicheskogo sinteza (Lisichansk Branch of the
State Scientific Research and Planning Institute of Nitrogen
Industry and Products of Organic Synthesis)

PRESENTED: September 19, 1960, by A. N. Frumkin. Academician

SUBMITTED: September 16, 1960

Card 4/7

TUR'YAN, Ya.I.; TSINMAN, A.I.

Oscillographic study of the drop of oxygen overvoltage on a nickel anode. Zhur. fiz. khim. 36 no.3:659-661 Mr '62.

(MIRA 17:8)

1. Lisichanskiy filial Gosudarstvennogo instituta azotnoy promyshlennosti.

L 17011-02

SWING CENTER RELS AFPTC JD

ACCESSION NR: AP3004070

S/0076/63/037/007/1598/1600

AUTHOR: Tsiman, A. I.

53
52

TITLE: Oxygen overvoltage on iron in alkali solutions

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 7, 1963, 1598-1600

TOPIC TAGS: oxygen overvoltage, iron, alkali solution, NaOH

ABSTRACT: Author studied the oxygen overvoltage on galvanized iron in NaOH solutions. Reason for experiment was that data concerning anodic evolution of oxygen on iron in alkali are limited and contradictory. The anode was prepared by electrolytic precipitation of iron from a chlorine bath onto a wire sealed in glass. The thickness of the galvanic covering was 0.06 - 0.08 mm. The electrode surface was prepared by scouring in warm 5N alkali, etched in 2N hydrochloric acid for 50 seconds and a prolonged (20 Hours) preliminary polarization by a current of 10^{-1} amp/cm². The solutions were purified by electrolysis on large platinum electrodes. A mercury oxide electrode in the same solution served as the comparison electrode. Author found that the capacity of the electrode established by the drop in overvoltage is much greater than for the double-layered. The theoretical equation, brought out in the hypothesis concerning the slowing-

Card 1/2

L 17717-63

ACCESSION NR: AP3004070

down of the second electrochemical stage, satisfactorily describes the relationships observed in the experiment. Orig. art. has: 3 figures, 2 tables and 3 formulas.

ASSOCIATION: Gosudarstvennyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza. Lisichanskiy filial (State institute for the nitrogen industry and organic synthesis products, Lisichansk branch)

SUBMITTED: 09Jul62

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: CH, PH

NO REF SOV: 006

OTHER: 002

Card 2/2

TSINMAN, A.I.

Effect of alkali concentration on oxygen overvoltage and the mechanism of anodic oxygen evolution on nickel at low current densities. Zhur. fiz. khim. 37 no.6:1343-1348 Je '63.

(MIRA 16:7)

1. Lisichanskiy filial Gosudarstvennogo proyektного i nauchno-issledovatel'skogo instituta azotnoy promyshlennosti.

(Nickel electrodes) (Oxidation, Electrolytic)

(Alkalies)

TSINMAN, A.I.

Oxygen overvoltage decay after switching off the polarized current on nickel, cobalt, iron, copper, and gold anodes. Elektrokhimiia 1 no.3:326-331 Mr '65.

(MIRA 18:12)

1. Gosudarstvennyy institut azotnoy promyshlennosti, Severodonetskiy filial.

TSINMAN, A.I.; KOVSMAN, Ye.P.; KUZUB, V.S.

Anodic behavior of titanium and stability of a platinum-titanium
anode in aqueous methanol solutions containing chlorine ions.
Ukr. khim. zhur. 31 no.9:923-926 '65. (MIRA 18:11)

1. Severodonetskiy filial Gosudarstvennogo nauchno-issledovatel'-
skogo i proyektnogo instituta azotnoy promyshlennosti i produktov
organicheskogo sinteza.

KOLOTYRKIN, Ya.M.; MAKAROV, V.A.; KUZUB, V.S.; TSINMAN, A.I.; KUZUB, L.G.

Anodic protection of heat exchangers made of 1Kh18N9T steel in concentrated sulfuric acid at temperatures of 100 - 120°. Zashch. met. 1 no.5:598-600 S-O '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni L.Ya.Karpova, Moskva.

TSINMAN, A.T.; KUZUB, V.S.

Dissolution of stainless steels at the potentials of passive
state disturbance by fluoride ions. Zhur. fiz. Khim. 39
no.8:2020-2021 Ag '65. (MIRA 18:9)

1. Severodonetskay filial Gosudarstvennogo instituta azotnoy
promyshlennosti.

KUZUB, V.S.; MEYMAN, N.S.; TSINMAN, A.I.

Anodic dissolution of nickel in solutions of sulfuric acid.
Zashch. met. 1 no.3:277-279 My-Je '65. (MIRA 18:8)

1. Gosudarstvennyy institut azotnoy promyshlennosti Severodonetsk'iy
filial.

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757110007-2

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757110007-2"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757110007-2

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757110007-2"

TSINMAN, A.I.

Oxygen overvoltage on gold. Elektrokhimiia 1 no.4:409-412

Ap '65.

(MIRA 18:6)

1. Gosudarstvennyy institut azotnoy promyshlennosti, Severodonetskiy filial.

L 4205-66 EWT(m)/EPF(c)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/WB

ACCESSION NR: AP5014132

UR/0365/65/001/003/0277/0279
620.193.141

AUTHOR: Kuzub, V. S.; Neyman, N. S.; Tsigan, A. I.

TITLE: Anodic dissolution of nickel in H_2SO_4 solutions

SOURCE: Zashchita metallov, v. 1, no. 3, 1965, 277-279, and insert facing p. 275

TOPIC TAGS: anodic oxidation, potentiometer, electrode potential, nickel plating

ABSTRACT: In this work, anodic potentiostatic measurements and metallography are used to study the dissolution of 99.2% pure Ni in a 1 N H_2SO_4 solution and in an electrolytic polishing solution, 21.5 N H_2SO_4 , at a temperature of $22 \pm 1^\circ$. The potentiostatic curves are obtained by using an electronic potentiostat. The specimens used had both planar and cylindrical shapes; at potentials above 1.3 v the strength of the current depended upon the separation and shape of the electrodes. Data on the dissolution of Ni are presented in the form of potentiostatic curves ($\lg i-a/cm^2$ as a function of ϕ -voltage) in both of the H_2SO_4 solutions. Some of the curves illustrate the dependence of current density and speed of dissolution on potential. Surface microphotographs of Ni are shown for various regions of the potential, after 5-10 min of dissolution. However, for the regions of stability

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L 4205-*

ACCESSION NR: AP5014132

(passivization) the immersion time was longer. In the 1 N H_2SO_4 for the transition towards the passivating region, the surface was found to be etched, and pitting was observed. In the secondary region of passivity, spots of intercrystalline corrosion were observed, while beyond this region they diminished. Intercrystalline corrosion of the Ni occurred in the 21.5 N H_2SO_4 in the interval of potential from 0.3 to 1.3 volts. This is rationalized in terms of established theories of oxygen adsorption on the Ni surface which resulted in electrochemical heterogeneity of the grains relative to the boundaries and enhanced intercrystalline corrosion. The absence of intercrystalline dissolution in the 21.5 N H_2SO_4 in the potential range from 1.7 to 2.2 volts is explained by the apparent effect of the limiting current in causing the presence of some type of diffusion layer to form on the surface of the Ni. An analogous pattern of behavior was observed in the electrolyte $H_3PO_4 + H_2SO_4 + CrO_3$, where a similar increase in speed of dissolution was observed with the beginning of oxygen evolution. The authors conclude that only in the presence of some diffusion layer can the rates of dissolution of grains and boundaries be equalized, otherwise the adsorption of oxygen will result in intercrystalline attack. Orig. art. has: 5 figures.

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L 4205-66

ACCESSION NR: AP5014132

ASSOCIATION: Gosudarstvennyy institut azotnoy promyshlennosti Severodonetskiy filial (State Institute of the Nitrogen Industry, North Donets Affiliate) 3

SUBMITTED: 14Dec64

ENCL: 00

^{44.55}
SUB CODE: GC, MM

NO REF SOV: 003

OTHER: 008

Card 3/3 *DP*

L 1254-66 EMT(m)/EPF(c)/ENA(d)/ENP(t)/ENP(z)/ENP(b) IJF(c) MSM/JD/EA/JN/NB/
MSW(OL)

ACCESSION NR: AP5021672

UR/0080/65/03E/008/1872/1874
620.191/.193

AUTHOR: Tsinman, A. I. ; Kuzub, V. S.

TITLE: Corrosion of stainless steels in solutions of dicarboxylic acids

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 8, 1965, 1872-1874

TOPIC TAGS: corrosion rate, stainless steel, corrosion resistant steel, chromium alloy, molybdenum steel, dicarboxylic acid, nickel, copper molybdenum titanium

ABSTRACT: A study was made of the corrosion behavior of ordinary stainless steels (1Kh18N9T, Kh1812M2T) and of a number of new experimental chromium-nickel, chromium-molybdenum, and chromium-nickel-molybdenum steels in a solution of adipic acid in the temperature range 160-245 C. A comparison was made of the corrosive activity of solutions of glutaric, succinic, adipic, and sebacic acids on Kh18N12M2T steel. Data were taken on the corrosion resistance of NIKhMo-20 steel, nickel, copper, molybdenum, and titanium. Corrosion rates were determined on rectangular samples of rolled sheet 2-3 mm thick with surfaces of 15-30 cm². Test results showed that the nickel content in chromium-

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Abstract: K18H12M2T was present

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ACCESSION NR: AP5021672

nickel steels has only a slight effect on the corrosion rate in adipic acid. However, the corrosion rate of austenitic steels (1Kh18N9T, OKh21N14B, OKh19N14B) is approximately 1.5-2.0 times less than that of ferritic-austenitic steels (OKh21N5B, OKh21N5T). In tests of chromium-molybdenum steels at 170, 225, and 240°C corrosion resistance increased with increased chromium and molybdenum content. With an increase in temperature, steels alloyed with additions of molybdenum or copper have greater chemical resistance in adipic acid solutions than chromium-molybdenum steels. It was determined that solutions of adipic acid do not differ in corrosion activity from solutions of other dicarboxylic acids. Experimental data indicated that in solutions of these acids, the corrosion rate of stainless steels increases sharply with rise in temperature. Chromium-nickel-molybdenum steels were found to have the greatest corrosion resistance. The most resistant materials in solutions of dicarboxylic acids were titanium, molybdenum and NIKhMo-20 steel. Orig. art. has: 2 figures and 2 tables

ASSOCIATION: Lisichanskiy filial Gosudarstvennogo instituta azotnoy promyshlennosti (Lisichansk Branch of the State Institute for the Nitrogen Industry)

SUBMITTED: 04Feb63

NR REF SOV: 003

ENCL: 00

SUB CODE: MM

OTHER: 000

Card 2/2

*These designations should begin with 0 (zero) instead of O (letter.)

L 1652-66 EWT(m)/EPF(c)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) IJP(c) MJW/JD/HW/JG/WB

ACCESSION NR: AP5021422

UR/0076/65/039/008/2020/2021

620.191/.1 9

AUTHOR: Tsinman, A. I.; Kuzub, V. S.

TITLE: Dissolution of stainless steels at potentials of disruption of the passive state by fluoride ions

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 8, 1965, 2020-2021

TOPIC TAGS: steel passivation, sodium fluoride, steel corrosion

ABSTRACT: Addition of sodium fluoride to sulfuric acid disrupts the passivation state of chromium-nickel steel. The dissolution rate of nickel is increased, but not that of chromium. An increase in the chromium content of steel from 13 to 27% decreases the dissolution rate in 1 N H_2SO_4 (containing 0.3 N NaF) by a factor of almost 100 at $\phi = 0.6 - 0.8$ V. This leads to the assumption that steels having zones poor in chromium should dissolve faster than hardened steels, and that the dissolution of such steels should have the character of intercrystalline corrosion. This assumption was proven correct by measuring the current density versus time with electrodes of 2Kh18N9 steel, one of which was heat-treated at 1200°C (30 min,

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ACCESSION NR: AP5021422

followed by quenching in water), the other ^{fb}annealed at 650°C (2 hr, followed by quenching in air). The annealed electrode dissolved rapidly owing to the presence of regions poor in chromium (grain boundaries); the rise in current density with time is due to a continuous increase in surface area as a result of the process of intercrystalline corrosion (see fig. of the Enclosure). The data show that the tendency toward such corrosion can be studied in sulfuric acid solutions containing F⁻ ions at potentials for which the passive state of steels is disrupted, no potentiostat being required. Orig. art. has: 4 figures. ⁴

ASSOCIATION: Gosudarstvennyy institut azotnoy promyshlennosti, Severodonetskiy filial (State Institute of the Nitrogen Industry, North Donets Branch)

SUBMITTED: 21Apr64

ENCL: 01

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SUB CODE: MM

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OTHER: 005

Card 2/3

L 1652-66

ACCESSION NR: AP5021422

ENCLOSURE: 01

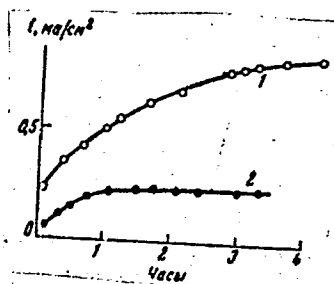


Fig. 1. Change in current density with time at $\varphi = 0.8$ V in 1 N H_2SO_4 + 0.3 N NaF, 2Kh18N9 steel. Heat treatment: 1 - 650°C, 2 hr, quenching in air; 2 - 1200°C, 30 min, quenching in water.

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DP

TSINMAN, A.I.; KUZUB, V.S.; SOKOLOVA, L.A.

Effect of fluoride ions on the electrochemical and corrosion
behavior of stainless steels, Zashch. met. 1 no.2:173-177
Mr-Apr '65. (MIRA 18:6)

1. Severodonetskiy filial Gosudarstvennogo instituta azotnoy
promyshlennosti.